at least two pins projecting from one of said modules at pin locations;

at least two pin passages within another of said modules at pin locations and through said face thereof, respective said pin passages being sized, shaped and positioned to receive respective said projecting pins;

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said ends of said fiber optic fibers are spaced from one another and from said pin locations of the connector module in accordance with a predetermined alignment pattern, and said ends of said waveguides are spaced from one another and from said pin locations of the substrate module in accordance with said predetermined alignment pattern, whereby each of said respective waveguides optically aligns with each of said respective fibers when said modules are attached together; and

said substrate module includes at least two wafers assembled together, and prior to assembly a first said wafer has said plurality of waveguides positioned thereon, and after assembly a second said wafer opposes said first wafer and accommodates said plurality of waveguides positioned on said first wafer.--

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B2

--16. (Amended) The fiber optic connection system in accordance with claim 1, wherein said second wafer has a plurality of channels which accommodate said plurality of waveguides when the wafers are assembled together.--

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B3

--21. (Twice Amended) A passive alignment fiber optic substrate module, comprising:

a substrate body having a first face and a second face;

a plurality of waveguides which are within said substrate body and which have first ends terminating at said first face and second ends terminating at said second face of the substrate module to define an input end and an output end which are different from each other;

a pin location at said first face, and a pin location at said second face;

said first ends of said waveguides are spaced from one another and from one said pin location and said second ends are spaced from one another and from another said pin location of the substrate module in accordance with respective predetermined alignment patterns

which are adapted to coincide with fiber optic fibers and pin locations of another component; and

said substrate body includes at least two wafers assembled together, and prior to assembly a first said wafer has said plurality of waveguides positioned thereon, and after assembly a second said wafer opposes said first wafer and accommodates said plurality of waveguides positioned on said first wafer.--

--29. (Amended) The fiber optic substrate module in accordance with claim 21, wherein said second wafer has a plurality of channels which accommodate said plurality of waveguides when the wafers are assembled together.--

--33. (Twice Amended) A method for passive optical alignment of a fiber optic connection system, comprising the steps of:

providing a connector module having a plurality of fiber optic fibers having ends terminating at a face of the connector module and having at least two pin locations;

spacing said ends of the fiber optic fibers and said pin locations in accordance with a predetermined alignment pattern;

assembling, by an assembly procedure separate from said providing step, a substrate module having a plurality of waveguides having ends terminating at a face of the substrate module and having at least two pin locations;

spacing said ends of the waveguides from one another and from said pin locations of the substrate module in accordance with said predetermined alignment pattern;

attaching the connector module and substrate module together in order to thereby automatically optically align each of the respective waveguides with each of the respective fibers when the modules are attached together; and

wherein said substrate module assembling procedure includes:

forming a wafer having a plurality of aligned respective channels;

forming another wafer having a plurality of aligned respective waveguides; and